



PROGRESS REPORT NO. 117

TO: Laura Buelow, U.S. Environmental Protection Agency (EPA) – via Email
Dustan Bott, EPA – via Email

FROM: Kris McCaig – Teck American Incorporated (TAI)

DATE: April 12, 2016

FILE NO: 01-773180-000

RE: Upper Columbia River (UCR) Remedial Investigation/Feasibility Study
(RI/FS) - Progress Report No. 117 Month Ending March 2016

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the aforementioned Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Phase 2 Sediment Study - Field sampling activities were completed on October 24, 2013, short-term bioassay tests (i.e., 10-day *Chironomus dilutes* and 28-day *Hyaella azteca*) were completed for all batches on April 24, 2014, long-term bioassay tests (i.e., *Chironomus dilutes* and 42-day *Hyaella azteca*) were completed for all batches on May 4, 2015, and backscatter electron microscopy (BSEM) analysis on selected samples was completed in May 2015. TAI delivered the draft data summary report (DSR) to EPA on December 18, 2015.

Chemicals of Potential Concern (COPC) Refinement Document – as required in “Resolution A” in the January 18, 2013 letter from EPA which detailed the resolution to the TAI’s dispute of EPA’s comments on the Phase 2 Sediment Study quality assurance project plan, TAI submitted the Draft COPC Refinement Document to EPA on March 31, 2015. TAI is in receipt of EPA comments dated October 7, 2015 and has reviewed and discussed the comments with EPA. It was agreed that TAI will respond to the comments and acknowledge the technical issues raised by EPA in future refinements but the COPC refinement document will remain draft for now.

Bossburg Flat Beach Refined Sediment and Soil Study – Field sampling activities were completed on May 8, 2015. Sediment and soil sample chemistry analyses and data validation are complete and validated data have been made available for EPA’s quality assurance review. TAI is in receipt of EPA letters documenting their quality assurance review for Parts 1 through 5 of the validated data and TAI responded to EPA’s review comments on October 5, 2015. The Bossburg Study Final Cultural Resources Monitoring

report was submitted to EPA on November 12, 2015. TAI received comments on the October 7, 2015 draft DSR from EPA on January 6, 2016 and had a call with EPA on January 29, 2016 to get clarification on some of the comments. TAI submitted the draft final DSR (red line strike-out version) and response to EPA's January 6, 2016 comments on March 22, 2016.

Benthic Macroinvertebrate Tissue Study – TAI received comments from EPA on the November 2014 Draft Quality Assurance Project Plan (QAPP) for the Macroinvertebrate Tissue Study on November 16, 2015 and submitted the revised document and response to comments to EPA on February 4, 2016. EPA held a meeting with the Cultural Resources Working Group and TAI consultants on February 24, 2016 to review sample location files and discuss how samples will be collected. Following the meeting, EPA developed comments and suggested edits within Appendix D of the February 6, 2015 version of the QAPP and provided the document to TAI on March 4, 2016. EPA submitted comments on the remaining parts of the February 2016 version of the QAPP on March 11, 2016 and TAI submitted a revised QAPP and response to comments on March 25, 2016. At the time of writing, on April 7, 2016 EPA submitted a letter to TAI with conditional approval of the QAPP providing TAI make updates as detailed in the letter. TAI is working to finalize the QAPP, obtain permits and permissions and develop and distribute a field sampling schedule with the plan to begin sampling on April 26, 2016.

Human Health – TAI received from EPA, the draft data analysis report (DAR) for the Recreational Use Survey on January 17, 2014 and submitted comments to EPA on June 11, 2014. TAI received from EPA, a November 23, 2015 Memorandum written by SRC titled "Recreation Use Survey Fish Ingestion Rate" and is reviewing and evaluating to provide comments. It is important to note that SRC's memorandum references the following version of the DAR for the recreational use survey: "SRC, Inc. (2014). Data analysis report for the recreational use survey for the Upper Columbia River Site human health risk assessment and remedial investigation/feasibility study. Prepared under contract for the Environmental Protection Agency. January 16." As noted above, TAI submitted comments to EPA on the January 2014 DAR version on June 11, 2014, but did not receive a final version of the document. TAI has requested the final DAR from EPA for use in completing comments on the SRC memorandum.

2016 Residential Soil Sampling – Planning efforts continued for the 2016 residential soil study based on EPA's August 11, 2015 directive letter to TAI to conduct the residential soil sampling in 2016. Upon EPA's approval of the access agreement letter and attachments, TAI mailed letters to 506 property owners on January 11, 2016. A second round of letters were mailed out on March 4, 2016 to landowners who have not responded to the initial letter request and on March 6, 2016 letters were mailed to sixty landowners in the Marble area who did not receive letters during the first mailing in January. TAI is continuing to work with EPA to respond to landowner questions and track responses and is coordinating with The Confederated Tribes of the Colville Reservation to provide information they need to obtain access permission for reconnaissance and sampling at tribal allotments within the 2016 sampling area. TAI

submitted a draft Addendum No. 1 to the 2014 Residential Soil Study QAPP to EPA on November 20, 2015 and a draft Field Reconnaissance Plan (FRP) on December 16, 2015 for review and comment. TAI received comments from EPA on the draft QAPP Addendum No. 1 and draft FRP on February 19, 2016 and submitted revised documents and response to comments to EPA on March 10, 2016. EPA provided further comments on March 22, 2016 and TAI responded with a revised FRP on March 24 and a revised QAPP Addendum No. 1 on April 1, 2016. At the time of writing EPA provided a letter with approval of the Final FRP on April 12, 2016 and the QAPP Addendum No. 1 will remain as draft final until the results of the field reconnaissance are incorporated and approved by EPA this summer.

White Sturgeon Sediment Toxicity Study – In January 2014 TAI submitted to EPA, the draft final version of the Assessment of Sediment Toxicity to White Sturgeon DSR and response to EPA's comments. On August 10, 2015 TAI met with EPA to discuss the draft final DSR and TAI's response to comments and clarify further changes needed in order to revise the DSR. TAI submitted a revised DSR and revised response to comments to EPA on November 20, 2015.

Baseline Ecological Risk Assessment (BERA) – In August 2015 TAI provided draft straw man approaches for development of toxicity reference values (TRVs) for wildlife, sediment and porewater, and soil which served to initiate discussions between TAI, EPA and the participating parties (PPs). TAI received two comment letters on December 18, 2015 which detailed EPA and PP Workgroup comments on the approaches. TAI evaluated the comments and provided requested information prior to the TRV development meetings held on January 20 and 21, 2016 in Seattle, WA. During the meetings TAI presented information focused on addressing comments from EPA and the PPs, and had time for discussion between technical team members of each group. Information from the meeting (e.g., sign-in sheets, agendas, presentations, etc.) has been posted on the secure side of the project website www.ucr-rifs.com and more will be posted as it becomes available (e.g., draft meeting notes, technical papers, etc.). TAI submitted draft meeting notes to EPA on February 9, 2016 for review and approval.

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4501.